Contents

Abbott, I.: Aboriginal Man as an Exterminator of Wallaby and Kangaroo Populations on Islands Round Australia 347
Adamandiadou, S., s. Siafaca, L., et al. 276
Alberte, R.S., s. Clough, J.M., et al. 221
Arendonk, R.C.M. van, s. Blommers, L.H.M. 87
Augspurger, C.K.: Irregular Rain Cues and the Germination and Seedling Survival of a Panamanian Shrub (*Hybanthus prunifolius*) 53
Baars, M.A.: Patterns of Movement of Radioactive Carabid Beetles 125
Bach, C.E.: Effects of Plant Diversity and Time of Colonization on an Herbivore-Plant Interaction 319
Ball, M.C.: Patterns of Secondary Succession in a Mangrove Forest of Southern Florida 266
Ballinger, R.E., s. Schwartz, S.S. 181
Barden, L.S.: Tree Replacements in Small Canopy Gaps of a *Tsuga canadensis* Forest in the Southern Appalachians, Tennessee (*Short Communications*) 141
Bender, M.M., Berge, A.J.: Influence of N and K Fertilization and Growth Temperature on $^{13}C/^{12}C$ Ratios of Timothy (*Phleum pratense* L.) 117
Benecke, U.: Photosynthesis and Transpiration of *Pinus radiata* D. Don Under Natural Conditions in a Forest Stand 192
Berge, A.J., s. Bender, M.M. 117
Berry, J.F., Shine, R.: Sexual Size Dimorphism and Sexual Selection in Turtles (Order Testudines) 185
Blommers, L.H.M., Arendonk, R.C.M. van: The Profit of Senescene in Phytoseiid Mites 87
Bohl, E.: Diel Pattern of Pelagic Distribution and Feeding in Planktivorous Fish 368
Bond, H.W., Brown, W.L.: The Exploitation of Floral Nectar in *Eucalyptus incrassata* by Honeyeaters and Honeybees 105
Bradshaw, W.E., Phillips, D.L.: Photoperiodism and the Photic Environment of the Pitcher-Plant Mosquito, *Wyeomyia smithii* 311
Brandt, D.Ch.: Is the Mound of *Formica polyctena* Foerst. In Origin a Stimulation of a Rock (*Short Communications*) 281
Briese, L.A., s. Dickson, G.W., et al. 8
Brinckmann, E., s. Schulze, E.-D., et al. 258
Brown, W.L., s. Bond, H.W. 105
Bulnheim, H.-P.: Comparative Studies on the Physiological Ecology of Five Euryhaline *Gammarus* Species 80
Burky, A.J., s. Hornbach, D.J., et al. 164
Cammen, L.M.: Ingestion Rate: An Empirical Model for Aquatic Deposit Feeders and Detritivores 303
Carrel, J.E., s. Wieder, R.K. 31
Case, J.W., Krouse, H.R.: Variations in Sulphur Content and Stable Sulphur Isotope Composition of Vegetation Near a SO_2 Source at Fox Creek, Alberta, Canada . . . 248
Clough, J.M., Alberte, R.S., Teeri, J.A.: Photosynthetic Adaptation of *Solanum dulcamara* L. to Sun and Shade Environments. III. Characterization of Genotypes with Differing Photosynthetic Performance 221
Collins, N.M.: The Distribution of Soil Macrofauna on the West Ridge of Gunung (Mount) Mulu, Sarawak 263
Damkaer, D.M., Dey, D.B., Heron, G.A., Prentice, E.F.: Effects of UV-B Radiation on Near-surface Zooplankton of Puget Sound 149
Dey, D.B., s. Damkaer. D.M., et al. 149
Dickson, G.W., Briese, L.A., Giesy, J.P., Jr.: Tissue Metal Concentrations in Two Crayfish Species Cohabiting a Tennessee Cave Stream 8
Donagi, A.E., s. Goren, A.I. 418
Dreisig, H.: Daily Activity, Thermoregulation and Water Loss in the Tiger Beetle *Cicindela hybrida* 376
Duncan, A., s. Klekowski, R.Z., et al. 119
Duncan, A., s. Schiemer, F., et al. 205
Ehleringer, J., s. Mooney, H.A., et al. 177
Ehleringer, J.R., s. Forseth, I. 149
Ehleringer, J.R., s. Gulmon, S.L., et al. 40
Eller, B.M., s. Schulze, E.-D., et al. 258
Forseth, I., Ehleringer, J.R.: Solar Tracking Response to Drought in a Desert Annual 149
Freeman, D.C., Harper, K.T., Ostler, W.K.: Ecology of Plant Dioecy in the Intermountain Region of Western North America and California 410
Frost, T.M., s. Starkweather, P.L., et al. 26
Giesy, J.P., Jr., s. Dickson, G.W., et al. 8
Gilbert, J.J., s. Starkweather, P.L., et al. 26
Goren, A.I., Donagi, A.E.: Assessment of Atmospheric Ozone Levels in Israel Through Foliar Injury to Bel-W3 Tobacco Plants 418
Gulmon, S.L., Rundel, P.W., Ehleringer, J.R., Mooney, H.A.: Spatial Relationships and Competition in a Chilean Desert Cactus 40
Gulmon, S.L., s. Mooney, H.A., et al. 177
Guy, R.D., Reid, D.M., Krouse, H.R.: Shifts in Carbon Isotope Ratios of Two C_3 Halophytes Under Natural and Artificial Conditions 241
Han, D., s. Watt, W.B., et al. 44
Harper, K.T., s. Freeman, D.C., et al. 410
Heath, D.J.: Colour Polymorphism in the Salt-Marsh Isopod, *Sphaeroma rugicauda;* Evidence for Stable Equilibrium Frequencies 95
Heller, J.: Visual Versus Non-Visual Selection of Shell Colour in an Israeli Freshwater Snail 98
Heron, G.A., s. Damkaer, D.M., et al. 149
Hnatiuk, R.J.: C_4 Photosynthesis in the Vegetation of Aldabra Atoll 327
Holbrook, S.J.: Species Diversity Patterns in Some Present and Prehistoric Rodent Communities 355
Hornbach, D.J., Way, C.M., Burky, A.J.: Reproductive Strategies in the Freshwater Sphaeriid Clam, *Musculium partumeium* (Say), from a Permanent and a Temporary Pond 164
House, S.M., Taylor, P.J., Spellerberg, I.F.: Patterns of Daily Behaviour in Two Lizard Species *Lacerta agilis L.* and *Lacerta vivipara* Jacquin 396
Hoyt, D.F., s. Kenagy, G.J. 403
Jaeger, R.G.: Fluctuations in Prey Availability and Food Limitation for a Terrestrial Salamander 335
Jamieson, G.S., Scudder, G.G.E.: Predation in *Gerris* (Hemiptera): Reactive Distances and Locomotion Rates . . 13
Jenkins, S.J.: Seasonal and Year-to Year Differences in Food Selection by Beavers 112
Kane, T.C., s. Turanchik, E.J. 63
Keller, Th.: The Simultaneous Effect of Soil-Borne NaF and Air Pollutant SO_2 on CO_2-Uptake and Pollutant Accumulation (Short Communication) 283
Kenagy, G.J., Hoyt, D.F.: Reingestion of Feces in Rodents and Its Daily Rhythmicity 403
Kenagy, G.J., s. Trombulak, S.C. 342

Klekowski, R.Z., Schiemer, F., Duncan, A.: A Bioenergetic Study of an Benthic Nematode, Plectus palustris de Man 1880, Throughout Its Life Cycle. I. The Respiratory Metabolism at Different Densities of Bacterial Food . . 119
Klekowski, R.Z., s. Schiemer, F., et al. 205
Krouse, H.R., s. Case, J.W. 248
Krouse, H.R., s. Guy, R.D., et al. 241
Lanciani, C.A.: The Influence of Parasitic Water Mites on the Instantaneous Death Rate on Their Hosts 60
Lee, J.C.: Comparative Thermal Ecology of Two Lizards . 171
Margaris, N.S., s. Siafaca, L., et al. 276
Mathavan, S., Muthukrishnan, J.: Use of Larval Weight and Lenght as Indices of Gut Content Weight in Some Lepidopterous Larvae 317
Melack, J.M.: Temporal Variability of Phytoplankton in Tropical Lakes 1
Mooney, H.A., Gulmon, S.L., Rundel, P.W., Ehleringer, J.: Further Observations on the Water Relations of *Prosopis tamarugo* of the Northern Atacama Desert 177
Mooney, H.A., s. Gulmon, S.L., et al. 40
Mooney, H.A., s. Winner, W.E. 290, 296
Muthukrishnan, J., s. Mathavan, S. 371
Ostler, W.K., s. Freeman, D.C., et al. 410
Phillips, D.L., s. Bradshaw, W.E. 311
Pielou, E.C.: On A.J. Underwood's Model for a Random Pattern (*Short Communication*) 143
Prentice, E.F., s. Damkaer, D.M., et al. 149
Price, R., Warwick, R.M.: The Effect of Temperature on the Respiration Rate of Meiofauna 145
Reid, D.M., s. Guy, R.D., et al. 241
Rundel, P.W., Stichler, W., Zander, R.H., Ziegler, H.: Carbon and Hydrogen Isotope Ratios of Bryophytes from Arid Humid Regions 91
Rundel, P.W., s. Gulmon, S.L., et al. 40
Rundel, P.W., s. Mooney, H.A., et al. 177
Rundel, P.W., s. Wallace, C.S. 34
Schiemer, F., Duncan, A., Klekowski, R.Z.: A Bioenergetic Study of a Benthic Nematode, Plectus palustris de Man 1880, Throughout its Life Cycle. II. Growth, Fecundity and Energy Budgets at Different Densities of Bacterial Food and General Ecological Considerations 205
Schiemer, F., s. Klekowski, R.Z., et al. 119
Schmitt, R.J., s. Vance, R.R. 21
Schulze, E.-D., Eller, B.M., Thomas, D.A., Willert, D.J.v., Brinckmann, E.: Leaf Temperatures and Energy Balance of *Welwitschia mirabilis* in Its Natural Habitat 258
Schwartz, S.S., Ballinger, R.E.: Variations in Life History Characteristics of *Daphnia pulex* Fed Different Algal Species 181
Scudder, G.G.E., s. Jamieson, G.S. 13
Shine, R., s. Berry, J.F. 185
Siafaca, L., Adamandiadou, S., Margaris, N.S.: Caloric Content in Plants Dominating Maquis Ecosystems in Greece 276
Spellerberg, I.F., s. House, S.M., et al. 396
Starkweather, P.L., Gilbert, J.J., Frost, T.M.: Bacterial Feeding by the Rotifer *Brachionus calyciflorus:* Clearance and Ingestion Rates, Behavior and Population Dynamics 26
Stichler, W., s. Rundel, P.W., et al. 91
Tabashnik, B.E., s. Watt, W.B., et al. 44
Taylor, P.J., s. House, S.M., et al. 396
Teeri, J.A., s. Clough, J.M., et al. 221
Thomas D.A., s. Schulze, E.-D., et al. 258
Trombulak, S.C., Kenagy, G.J.: Effects of Seed Distribution and Competitors on Seed Harvesting Efficiency in Heteromyid Rodents 342
Turanchik, E.J., Kane, T.C.: Ecological Genetics of the Cave Beetle *Neaphaenops tellkampfii* (Coleoptera: Carabidae). 63
Urbani, C.B.: A Statistical Table for the Degree of Coexistence Between Two Species 287
Vance, R.R., Schmitt, R.J.: The Effect of Predator-Avoidance Behavior of the Sea Urchin, *Centrostephanus coronatus*, on the Breadth of its Diet 21
Waddington, K.D.: Flight Patterns of Foraging Bees Relative to Density of Artificial Flowers and Distribution of Nectar 199
Wallace, C.S., Rundel, P.W.: Sexual Dimorphism and Resource Allocation in Male and Female Shrubs of *Simmondsia chinensis* 34
Warwick, R.M., s. Price, R. 145
Watt, W.B., Han, D., Tabashnik, B.E.: Population Structure of Pierid Butterflies. II. A "Native"Population of *Colias philodice eriphyle* in Colorado 44
Way, C.M., s. Hornbach, D.J., et al. 164
Webb, D.R.: Environmental Harshness, Heat Stress, and *Marmota flaviventris* 390
Wieder, R.K., Carrel, J.E.: Radioactive Carbon-14 as an Indicator of Energy Flow in Litter Decomposition Studies 31
Willert, D.J.v., s. Schulze, E.-D., et al. 258
Williams, Ph., s. Zedler, J.B., et al. 236
Williamson, P.: Comparison of Metal Levels in Invertebrate Detritivores and Their Natural Diets: Concentration Factors Reassessed 75
Williamson, Ph.: Variables Affecting Body Burdens of Lead, Zinc and Cadmium in a Roadside Population of the Snail *Cepaea hortensis* Müller 213
Winfield, T., s. Zedler, J.B., et al. 236
Winner, W.E., Mooney, H.A.: Ecology of SO_2 Resistance: I. Effects of Fumigations on Gas Exchange of Deciduous and Evergreen Shrubs 290
Winner, W.E., Mooney, H.A.: Ecology of SO_2 Resistance: II. Photosynthetic Changes of Shrubs in Relation to SO_2 Absorption and Stomatal Behavior 296
Wong, S.C.: Elevated Atmospheric Partial Pressure of CO_2 and Plant Growth. I. Interactions of Nitrogen Nutrition and Photosynthetic Capacity in C_3 and C_4 Plants . . . 68
Zander, R.H., s. Rundel, P.W., et al. 91
Zedler, J.B., Winfield, T., Williams, Ph.: Salt Marsh Productivity with Natural and Altered Tidal Circulation . . . 236
Ziegler, H., s. Rundel, P.W., et al. 91
Erratum 286

Indexed in Current Contents